

Listing of the Claims:

1. (Original) ELISA kits for detecting procollagenase 3 and activated collagenase 3 in body fluids, especially in human serum and synovial fluid, and in cell culture supernatants, comprising at least the following separately packed elements:
 - a) a solid carrier having monoclonal antibodies which are bound thereto and sensitively and specifically bind human procollagenase 3 or activated collagenase 3;
 - b) human recombinant procollagenase 3 or activated collagenase 3 as a standard for the quantitative determination of this enzyme in body fluids;
 - c) a buffer for producing a standard series of the recombinant procollagenase 3 or activated collagenase 3;
 - d) a buffer for diluting the samples to be analyzed;
 - e) a detectably marked conjugate that binds to collagenase 3;
 - f) and a substrate that allows the visualization of the detectably marked conjugate.
2. (Original) The ELISA kit as described in Claim 1, wherein the monoclonal antibodies that are bound to the solid carrier are preferably monoclonal antibodies that are formed of the hybridoma having the deposit number DSM ACC 2572.
3. (Currently Amended) ~~The~~ An ELISA kit as described in Claim 1 ~~Claims 1 and 2~~, wherein a conjugated antibody combination of two components is used as ~~the detectably marked~~ a detectible labeled conjugate, said conjugated antibody having a binding affinity to the first component being a biotinylated antibody that binds to procollagenase 3 or to activated collagenase 3 and the second component being used as a high polymer streptavidin conjugate that binds to the biotinylated antibody.
4. (Currently Amended) ~~An~~ The ELISA kit as described in ~~Claims 1 and~~ Claim 2, wherein a conjugated antibody ~~that binds to collagenase 3~~ is used as ~~the detectably~~ a detectible labeled marked conjugate, and said conjugated antibody has binding affinity to procollagenase 3 or to activated collagenase 3.
5. (Currently Amended) The ELISA kit as described in Claim 3 ~~Claims 1, 2 and 4~~, wherein the antibodies that function as the conjugate are monoclonal and/or polyclonal antibodies.

6. (Currently Amended) The ELISA kit as described in Claim 1 ~~Claims 1 to 5~~, wherein the substances used as conjugates may be conjugated with all standard substances, preferably with:
 - horseradish peroxidase
 - alkaline phosphatase.
7. (Currently Amended) The ELISA kit as described in Claim 1 ~~Claims 1 to 6~~, wherein the human recombinant collagenase 3 used as the standard was expressed in eukaryotic cells and is present in solution or lyophilized.
8. (Currently Amended) The ELISA kit as described in Claim 1 ~~Claims 1 to 7~~, wherein the buffer for diluting the body fluids and cell culture supernatants to be analyzed contains sodium citrate.
9. (Currently Amended) The ELISA kit as described in Claim 1 ~~Claims 1 to 8~~, wherein microtiter plates or standard protein chip technologies are used as solid carriers.
10. (Original) Monoclonal antibodies that specifically detect and bind procollagenase 3; these monoclonal antibodies having properties like the monoclonal antibodies from the hybridoma cell line having deposit number DSM ACC 2572.
11. (Original) The monoclonal antibodies as described in Claim 10, whereby the monoclonal antibodies can be changed in a biochemical or molecular biological manner or synthetically, whereby the antibodies or parts that are unnecessary for the detection of procollagenase 3 are lacking, wholly or in part, or these parts are replaced by others.
12. (Currently Amended) The monoclonal antibodies as described in Claim 10 ~~Claims 10 to 14~~ that are produced from the hybridoma cell line having the deposit number DSM ACC 2572.
13. (Original) Hybridoma cell line having the deposit number DSM ACC 2572
14. (Original) Monoclonal antibodies that detect and bind activated collagenase 3 in a specific and sensitive manner, these antibodies having no affinity for procollagenase.
15. (Original) The monoclonal antibodies as described in Claim 10, whereby the monoclonal antibodies can be changed in a biochemical or molecular biological manner or synthetically, whereby the antibodies or parts that are unnecessary for the detection of

activated collagenase 3 are lacking, wholly or in part, or these parts are replaced by others.

16. (Currently Amended) ~~The use of~~ A method for using collagenase as a serological marker for diagnostics and especially for monitoring the course of inflammatory rheumatic diseases, especially rheumatoid arthritis.
17. (Currently Amended) ~~The method of claim 16, wherein said disease is The use of collagenase 3 as a serological marker for diagnosis and in particular for monitoring the course of systemic lupus erythematosus, especially for the developmental prognosis when there is tissue proliferation (tumor formation).~~
18. (Currently Amended) ~~The method of claim 16, wherein said disease is The use of collagenase 3 as a serological marker for diagnosis and for monitoring of the course of~~ other a tumorous diseases disease, especially mammary carcinomas and colorectal carcinomas.
19. (Currently Amended) ~~The method of claim 16, wherein said disease is selected from The use of collagenase 3 as a serological marker for diagnosis and monitoring of the course of~~ other diseases in which an increase of collagenase 3 is described in the scientific literature.
20. (New) An ELISA kit according to claim 3, wherein said conjugated antibody is conjugated with biotin and the detectible labeled conjugate further comprises streptavidin-conjugate, which binds to biotinylated antibodies.
21. (New) The method of claim 16, wherein said disease is selected from inflammatory rheumatic diseases, especially rheumatoid arthritis.